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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,157	04/01/2002	Livia Dragne	114-01	8553

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EXAMINER	
PARSLEY, DAVID J	
ART UNIT	**PAPER NUMBER**
3643	

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/009,157	DRAGNE ET AL.	
	Examiner	Art Unit	
	David J. Parsley	3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-8 and 11-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-8 and 11-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 April 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Amendment

1. This office action is in response to applicant's amendment dated 5-6-05 and this action is final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-8, 11-12, 14-16, 18, 20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,227,114 to Wu et al.

Referring to claims 1, 5-7 and 14 Wu et al. discloses a method and system of controlling a blasting network including an assembly of detonators – at 40-44, the blasting network being in a blasting system which further includes a control unit – at 36, and a communication link – at F, 30-34, C_1-C_n and 50-54, for transmitting messages between the control unit and the assembly of detonators, the messages consisting of safe and unsafe messages – see for example columns 3-4,

the method including the steps of designating at least one message as unsafe – see for example column 3 lines 60-67 and column 4 lines 1-31, placing the communication link in a control mode in which the communication link is monitored for the designated at least one unsafe message in the control mode preventing the designated at least one unsafe message from reaching the assembly of detonators – see for example at 60-64 and in column 3 lines 60-67 and column 4 lines 1-31, and placing the communication link in operational mode in which the designated at least one unsafe message is allowed to reach the assembly of detonators – see for example column 3 lines 60-67 and column 4 lines 1-31, and wherein in both the control mode and the operational mode the safe messages are permitted to be transmitted to the assembly of detonators via the communication link – see for example columns 3-4. Wu et al. further discloses the step of designating at least two unsafe messages – see for example column 3 lines 60-67 and column 4 lines 1-31.

Referring to claims 2 and 8, Wu et al. discloses wherein in the control mode of the communication link the or each unsafe message is prevented from reaching the assembly of detonators by preventing the onward transmission of the unsafe message – see at 60-64 and column 3 lines 60-67 and column 4 lines 1-31.

Referring to claims 11 and 15, Wu et al. discloses the control unit – at 36, is capable of generating legal unsafe messages, which are transmitted via the communication link in its operational mode – see for example columns 3-4.

Referring to claims 12 and 16, Wu et al. discloses the monitoring device is a filter – at 60-64.

Referring to claims 18, 20 and 22, Wu et al. discloses a method and system of controlling a blasting network including an assembly of detonators – at 40-44, the blasting network being in a blasting system which further includes a control unit – at 36, and a communication link – at F, 30-34, C_1-C_n and 50-54, for transmitting messages between the control unit and the assembly of detonators, the messages consisting of safe and unsafe messages – see for example columns 3-4, the method including the steps of designating at least one message as unsafe – see for example column 3 lines 60-67 and column 4 lines 1-31, placing the communication link in a control mode in which the communication link is monitored for the designated at least one unsafe message in the control mode preventing the designated at least one unsafe message from reaching the assembly of detonators – see for example at 60-64 and in column 3 lines 60-67 and column 4 lines 1-31, and placing the communication link in operational mode in which the designated at least one unsafe message is allowed to reach the assembly of detonators – see for example column 3 lines 60-67 and column 4 lines 1-31, and wherein in both the control mode and the operational mode the safe messages are permitted to be transmitted to the assembly of detonators via the communication link – see for example columns 3-4. Wu et al. further discloses the step of designating at least two unsafe messages – see for example column 3 lines 60-67 and column 4 lines 1-31. Wu et al. further discloses a locking device a locking device – at 60-64, to place the communication link in the control mode or operational mode – see for example columns 3-4.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 19, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. in view of U.S. Patent No. 6,101,916 to Panot et al.

Referring to claims 19, 21 and 23, Wu et al. discloses a method and system of controlling a blasting network including an assembly of detonators – at 40-44, the blasting network being in a blasting system which further includes a control unit – at 36, and a communication link – at F, 30-34, C_1-C_n and 50-54, for transmitting messages between the control unit and the assembly of detonators, the messages consisting of safe and unsafe messages – see for example columns 3-4, the method including the steps of designating at least one message as unsafe – see for example column 3 lines 60-67 and column 4 lines 1-31, placing the communication link in a control mode in which the communication link is monitored for the designated at least one unsafe message in the control mode preventing the designated at least one unsafe message from reaching the assembly of detonators – see for example at 60-64 and in column 3 lines 60-67 and column 4 lines 1-31, and placing the communication link in operational mode in which the designated at least one unsafe message is allowed to reach the assembly of detonators – see for example column 3 lines 60-67 and column 4 lines 1-31, and wherein in both the control mode and the operational mode the safe messages are permitted to be transmitted to the assembly of detonators via the communication link – see for example columns 3-4. Wu et al. further discloses the step of designating at least two unsafe messages – see for example column 3 lines 60-67 and column 4

lines 1-31. Wu et al. does not disclose the control unit is connected to the internet or intranet. Panot et al. does disclose the control unit – at 10, is connected to the internet or intranet – see for example column 7 lines 59-67. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Wu et al. and add the controller connected to the internet of Panot et al., so as to allow for information to be sent to and from the device from a remote location.

Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. or Wu et al. as modified by Panot et al. as applied to claims 20 or 22 above, and further in view of U.S. Patent No. 4,099,467 to MacKellar et al.

Referring to claims 13 and 17, Wu et al. and Wu et al. as modified by MacKellar et al. do not disclose placing the blasting network in the control and operational modes by means of a switch. MacKellar et al. does disclose placing the blasting network in the control and operational modes by means of a switch – at 16 and see for example column 3 lines 12-33. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Wu et al. or Wu et al. as modified by Panot et al. and add the switch of MacKellar et al., so as to allow for the device to be automatically controlled.

Allowable Subject Matter

4. The addition of the following limitations into the independent claims may receive favorable consideration upon approval via a supervisory or primary examiner:

"...a communication firewall comprising a locking device for placing a communication link to the blasting network in the control mode or the operational mode, said firewall further

comprises and electronic filter and two communication interfaces adapted to allow communication to take place with the communication link...".

Response to Arguments

5. Referring to claims 1, 6-7, 18 and 20, the Wu et al. reference US 6227114 does disclose providing a control mode in which at least one unsafe message is prevented from reaching the network of detonators as seen in column 3 lines 60-67 and column 4 lines 1-31, where any stray optical signals which could cause detonation are not allowed to reach the detonators. Further, the Wu et al. reference does disclose a control mode in which the unsafe message, which could be either of the wavelengths 1-n, once generated is prevented from reaching the assembly of detonators in that the mode of the device as seen in columns 3-4, where the unsafe stray optical signals are kept from the detonators can be construed as a control mode. As seen in figures 1-2 and 3a, all wavelengths 1 and 3-n are kept from going through the filter – at 62. These wavelengths 1 and 3-n, are considered unsafe in that they allow for detonation of certain detonators – at 40, 44 etc. Therefore these wavelengths are not capable of reaching the assembly of detonators via the filter – at 62, but then are capable of reaching the assembly of detonators if they travel through their corresponding filter – at 60, 64 etc.

Regarding claims 18 and 20, the Wu et al. reference discloses a locking device at either of C1-Cn or 30-34 or 60-64 as seen in figure 1.

Regarding claims 19, 21 and 23, the Panot et al. US 6101916 reference is not used to disclose the communication link in a control mode in which the communication link is monitored

for the designated at least one unsafe message in the control mode preventing the designated at least one unsafe message from reaching the assembly of detonators and placing the communication link in an operational mode in which the designated at least one unsafe message is allowed to reach the assembly of detonators and wherein both the control mode and the operational mode, the safe messages are permitted to be transmitted to the assembly of detonators via the communication link. The Wu et al. reference is used to disclose these claim limitations as seen above in paragraph 3. Therefore, these arguments are moot. Further, the Wu et al. reference discloses a method/device of controlling the detonation of explosives and the Panot et al. device discloses controlling the detonation of explosives. The Wu et al. reference uses electrical controls and the Panot et al. reference uses electrical controls which can be linked to the internet and therefore given the similarities in controlling the detonation of the explosives it is deemed that it would have been obvious to one of ordinary skill in the art to combine the Wu et al. and Panot et al. references. Further, the Wu et al. reference does disclose a control mode in which the unsafe message is prevented from reaching the assembly of detonators as seen in reference to claim 1 above in this paragraph of the office action.

Regarding claims 13 and 17, the MacKellar et al. reference US 4099467 does disclose different operating modes where the initiators – at 12, are activated or not and switches are used as seen in figure 1 to control activation of these modes. Both the MacKellar et al. references and the Wu et al. references involve electrical controls and thus it would have been obvious to one of ordinary skill in the art to use the electrical controls of one device with the other. Further, the Wu et al. reference discloses the communication link allows passage of a safe message to the assembly of detonators in control and operation modes but prevents passage of at least one

unsafe message to the assembly of detonators in the control mode as seen in reference to claim 1 above in this paragraph of the office action.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890. The examiner can normally be reached on 9hr compressed.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DP

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